In the Claims:

Please cancel Claims 1-75 without prejudice to applicants' right to pursue these claims in a later-filed continuation or divisional application.

Please add new Claims 76-81 as follows:

76. (new) A method of detecting the presence or absence of a mutation in the sequence of the *PKD2* gene, comprising the steps of:

(a) obtaining a polynucleotide sample from a subject;

(b) comparing the polynucleotide sample to a reference wild-type *PKD2* sequence; and

(c) determining the differences, if any, between the polynucleotide sample and the reference wild-type *PKD2* sequence, wherein the differences are mutations which comprise one or more deletion, insertion, point, or rearrangement mutations.

77. (new) The method of Claim 76, wherein the subject is an embryo, fetus, newborn, infant, or adult.

78. (new) The method of Claim 76, wherein the polynucleotide sample is DNA or RNA.

79. (new) A method of detecting the presence or absence of a mutation in the sequence of the *PKD2* gene, comprising the steps of:

(a) obtaining a polynucleotide sample from a subject; and

(b) performing sequence analysis of the polynucleotide sample to detect the presence or absence of a mutation in the sequence of the *PKD2* gene of the subject,